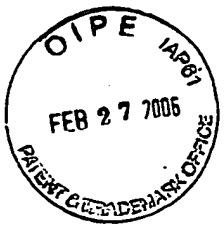

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(Attorney Docket No: 004367.00019)

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Deposited February 27, 2006

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By: _____

Application of:	Didenko, et al.
Serial No.:	10/683,948
Filing Date:	October 10, 2003
Title:	**Controlled Chemical Aerosol Flow Synthesis of Nanometer-Sized Particles and Other Nanometer-Sized Products**

Transmitted herewith are the following documents:

- X Transmittal Form (1 page)
- X Supplemental Information Disclosure Statement (1 page)
- X PTO/SB/08b
- X Cited Non-Patent References (7 references)
- X International Search Report
- X PCT Written Opinion of the International Searching Authority
- X Return Receipt Postcard

Attorney Case No.: 011184.00005

OIPE IAP67
FEB 27 2006
PATENT & TRADEMARK OFFICE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
Attorney Docket No. 004367.00019

In re U.S. Patent Application of Didenko, et al.	
Application No. 10/683,948	Group Art Unit: 1732
Filed: October 10, 2003	Examiner: TBA
FOR: Controlled Chemical Aerosol Flow Synthesis of Nanometer-Sized Particles and Other Nanometer-Sized Products	

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

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Pursuant to 37 CFR §§1.97, Applicants wish to make the documents listed on the enclosed Form PTO/SB/08b of record in the above-identified application. These documents are listed in the International Search Report and PCT Written Opinion of the International Searching Authority mailed February 8, 2006 (courtesy copy enclosed) in the corresponding PCT Application PCT/US2004/032734. This Information Disclosure Statement is in compliance with the continuing duty of candor as set forth in 37 CFR §1.56. Copies of references are enclosed.

No fee is believed due, however, the Commissioner is hereby authorized to charge any fees that may be due or credit any overpayment of fees to our Deposit Account No. 19-0733.

Respectfully submitted,

Dated: February 27, 2006

By: _____

Robert H. Resis
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OIPE IAP61
FEB 27 2006
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SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 1

Complete if Known	
Application Number	10/683,948
Filing Date	10/10/2003
First Named Inventor	Yuri T. Didenko
Art Unit	1732
Examiner Name	TBA
Attorney Docket Number	004367.00019

NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
	1	OKUYAMA, KIKUO et al., "Preparation of ZnS and CdS Fine Particles Sizes by a Spray Pyrolysis Method", Journal of Materials Science, 1997, pgs. 1229-1237, vol. 32, Chapman & Hall	
	2	PENG, XIAOGANG et al., "Shape Control of CdSe Nanocrystals", Nature, March 2, 2000, pgs. 59-61, vol. 404, Macmillian Magazines, Ltd.	
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	4	MURRAY, C.B. et al., "Synthesis and Characterization of Nearly Monodisperse CdE (E=S, Se, Te) Semiconductor Nanocrystallites", Journal of the American Chemical Society, 1993, pgs. 8706-8715, vol. 115, no. 19, American Chemical Society, USA	
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Examiner Signature		Date Considered	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 2

Complete if Known	
Application Number	10/683,948
Filing Date	October 10, 2003
First Named Inventor	Didenko er al.
Group Art Unit	(TBA)
Examiner Name	(TBA)
Attorney Docket Number	04367.00019

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
MM	8	Mdleleni, M. M.; Hyeon, T.; Suslick, K. S. Sonochemical synthesis of nanostructured molybdenum sulfide. *J. Am. Chem. Soc.* **120,** 6189-6190, (1998).	
	9	Alivisatos, A. P. Perspectives on the physical chemistry of semiconductor nanocrystals. *J. Phys. Chem.* **100,** 13226-13239 (1996).	
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	12	Green, M., O'Brien, P. O. Recent advances in the preparation of semiconductors as isolated nanometric particles: new routes to quantum dots. *Chem. Comm.* **11,** 2235-2241 (1999).	
	13	T. Trindadae, P. O'Brien, N. L. Pickett. Nanocrystalline semiconductors: synthesis, properties and perspectives. *Chem. Mater.* **13,** 3843-3858 (2001).	
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	20	Klimov, V. I., et al. Optical gain and stimulated emission in nanocrystals quantum dots. *Science* **290,** 314-317 (2000).	
	21	Eisler, H-J. et al. Color-selective semiconductor nanocrystals laser. *Appl. Phys. Lett.* **80,** 4614-4616 (2002).	
	22	Thurston, T. R.; Wilcoxon, J. P. Photooxidation of organic chemicals catalysed by nanoscale MoS_2. *J. Phys. Chem. B.* **103,** 11-17 (1999).	
	23	Murray, C. B.; Norris, D. J.; Bawendi, M. G. Synthesis and characterization of nearly monodisperse CdE (E= S, Se, Te) semiconductor nanocrystallites. *J. Am. Chem. Soc.* **105,** 88706-88715 (1993).	
	24	~~Peng, Z. A.; Peng, X. Formation of high quality CdTe, CdSe, and CdS~~ nanocrystals using CdO as precursor. *J. Am. Chem. Soc.* **123,** 183-184 (2001).	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 2 of 2

Complete if Known	
Application Number	10/683,948
Filing Date	October 10, 2003
First Named Inventor	Didenko er al.
Group Art Unit	(TBA)
Examiner Name	(TBA)
Attorney Docket Number	04367.00019

MD	25	Gratzel, M. Photoelectrochemical cells. *Nature (London),* **414,** 338-344 (2001).	
MD	26	Larson, D. et al. Water-soluble quantum dots for multiphoton fluorescence imaging in vivo. *Science* **300,** 1434-1436 (2003).	
	27	Manna, L.; Sher, E. C.; A. P. Alivisatos. Synthesis of soluble and processable ~~rod-, arrow-, teardrop-, and tetrapod-shaped CdSe nanocrystals. *J. Am. Chem. Soc.* **122,** 12700-12706 (2000).~~	
	28	Peng, Z. A.; Peng, X. Nearly monodisperse and shape-controlledCdSe nanocrystals via ~~alternative routes: nucleation and growth. *J. Am. Chem. Soc.* **124,** 3343-3353 (2002).~~	
	29	Okuyama, K. et al. Preparation of ZnS and CdS fine particles with different particle sizes by a spray pyrolysis method. *J. Mater. Sci.* **32,** 1229-1237 (1997).	
	30	Okuyama, K.; Lenggoro, W. Preparation of nanoparticles via spray route. *Chem. Eng. Sci.* **58,** 537-547 (2003).	
MD	31	Striolo, A. et al. Molecular weight, osmotic second viral coefficient, and extinction coefficient of colloidal CdSe nanocrystals. *J. Phys. Chem. B,* **106,** 5500-5505 (2002).	
MD	32	Qu, L.; Peng, X. Control of photoluminescence properties of CdSe nanocrystals in growth. *J. Am. Chem. Soc.* **124,** 2049-2055 (2002).	
MD	33	American Chemical Society 34th Great Lakes Regional Meeting; Minneapolis, MN, Item No. 301, Tuesday, June 4, 2002, Nolte Room at 9:20-9:45 a.m. Applications of Ultrasound to Materials Chemistry. Kenneth S. Suslick, Yuri T. Didenko, Abstract (1 page); Slides (10 pages).	

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Examiner Signature	M Thelen	Date Considered	3/06

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SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 1

Complete If Known	
Application Number	10/683,948
Filing Date	10/10/2003
First Named Inventor	Yuri T. Didenko
Art Unit	1732
Examiner Name	TBA
Attorney Docket Number	004367.00019

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
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Examiner Signature		Date Considered	3/06

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TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

Application Number	10/683,948
Filing Date	10/10/2003
First Named Inventor	Didenko et al.
Art Unit	1732
Examiner Name	
Attorney Docket Number	004367.00019

ENCLOSURES *(check all that apply)*

- ☐ Fee Transmittal Form
  - ☐ Fee Attached
- ☐ Amendment / Reply
  - ☐ After Final
  - ☐ Affidavits/declaration(s)
- ☐ Extension of Time Request
- ☐ Express Abandonment Request
- ☒ Information Disclosure Statement
- ☐ Certified Copy of Priority Document(s)
- ☐ Reply to Missing Parts/ Incomplete Application
  - ☐ Reply to Missing Parts under 37 CFR1.52 or 1.53
- ☐ Drawing(s)
- ☐ Licensing-related Papers
- ☐ Petition
- ☐ Petition to Convert to a Provisional Application
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- ☐ Appeal Communication to Board of Appeals and Interferences
- ☐ Appeal Communication to TC **(Appeal Notice, Brief, Reply Brief)**
- ☐ Proprietary Information
- ☐ Status Letter
- ☒ Other Enclosure(s) *(please identify below)*:
  - PTO/SB/08b
  - 7 Non-Patent References
  - International Search Report
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SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm	Banner & Witcoff, LTD.		
Signature			
Printed Name	Robert H. Resis		
Date	2/27/2006	Reg. No.	32,168

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